

Gestion de Projet et Génie Logiciel

Introduction du cours

Master 1, Lyon 1

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Outline

1 Course Introduction

Objectives

- Software engineering (Génie Logiciel): the art of making “good” software, at reasonable price
- Project management: what’s left, other than development? (need analysis & specification, team management, ...)
- Approach:
 - ▶ Good practices: tests, design patterns, ...
 - ▶ Tooling: continuous integration, version control, unit testing, ...
 - ▶ Organization: project lifecycle, agile methods
 - ▶ Speakers from several external companies
- Many notions usable directly \Rightarrow apply in your school project, your company (apprentices), ...



Practical Aspects

- **Course material:** <https://forge.univ-lyon1.fr/matthieu.moy/mif01-2020>
 - ▶ In your web browser
 - ▶ `git clone https://forge.univ-lyon1.fr/matthieu.moy/mif01-2020` once, `git pull` periodically.
 - ▶ Slides, exercises, labs, examples of code
- **Evaluation:**
 - ▶ Final exam
 - ▶ Mini-project: deadline = Sunday, Sept 22nd 2019, 23:59 (TOMUSS)
 - ▶ Teams of 2 students (exceptionally, team of 1 is possible, without bonus)
- **Schedule:** see ADE (link on home page above)

Assumed to be Previously Learnt

- Object-Oriented Programming basics:

`http:`

`//tabard.fr/courses/2015/mif17/2015/MIF17_Rappel_objet.pdf`

- UML Modeling basics:

- ▶ Class diagrams (classes, object, package, etc.):

`http://tabard.fr/courses/2015/mif17/2015/UML-Statique.pdf`

- ▶ Dynamic diagrams (sequence, state-machine):

`http://tabard.fr/courses/2015/mif17/2015/UML-Dynamique.pdf`

Outline

- Generalities (today, tomorrow)
- Tools for code management
- Design-patterns
- Specifications
- Agile methods
- Tests
- Ethics
- Project management

Distribution

- 10×1h30 Lecture (CM)
- 2×1h30 Tutorial (TD)
- 8×1h30 Labs (TP)